

Michael Berkoff contact information – 773-750-5793

Allied Landfill Talking Points – May 27, 2014 Congressional Tour

Allied Landfill Background

The Allied Landfill OU is defined as the areas between Cork Street and Alcott Street where contamination from paper operations is located. Cork Street forms the southern boundary of the OU, and Alcott Street runs along the northern boundary. Portage Creek runs through the property, bisecting the OU. Allied Landfill includes areas that are zoned for residential, commercial, and manufacturing uses. Residential development exists along a portion of the eastern side of the OU, and a railroad corridor forms a portion of the western boundary. Commercial and manufacturing properties are located north and south of Allied Landfill and along portions of the eastern and western sides of the property.

Paper mills were located on or near the Allied Landfill beginning at least as early as the 1870s. From at least the 1950s through the 1970s, those mills recycled carbonless copy paper that contained PCBs as a carrier for the ink. Wastewater generated in that process was contaminated with PCBs, which adsorbed or adhered to suspended particles such as cellulose and clay in the wastewater.

Paper mills associated with OU1 include mills referred to as the Bryant Mill and the Monarch Mill, both of which were owned and operated by various companies at different times. Millennium Holdings (and later Lyondell) was the successor to those companies. The Bryant Mill was located on the northern part of OU1 while the Monarch Mill was located east and south of Portage Creek. These mills included carbonless copy paper recycling in their operations.

The mills either discharged the contaminated wastewater directly to Portage Creek or first dewatered the wastewater in settling lagoons, intended to remove some of the particles, prior to discharge. Settling lagoons were located at areas of OU1 now referred to as the Bryant Historic Residuals Dewatering Lagoon (HRDL) and Former Residuals Dewatering Lagoons (FRDLs), the Monarch HRDL, and the Former Bryant Mill Pond (meat of the porkchop).

The Bryant Mill Pond was formed by the damming of Portage Creek at Alcott Street, impounding the creek within the northern part of the OU. The Alcott Street Dam was built in 1895 to provide hydroelectric power and to control water for the Bryant Paper Mills. The RI report for Allied Landfill, completed by MDEQ in 2008, discusses the Bryant Mill Pond in greater detail. In 1976, Allied Paper Company obtained a permit from the Michigan Department of Natural Resources to draw down the reservoir in an effort to reduce contamination impacts through discharge of sediment or groundwater to Portage Creek. Surface water in Portage Creek was lowered 13 feet during the drawdown, which exposed sediments that had accumulated over the many years of mill operations.

Previous remediation work

1. TCRA of Bryant Mill Pond – cashout by Millenium; EPA implementation
 - a. 150,000 cy of paper residuals excavated and consolidated into HRDL/FRDLs area.
 - b. 10 ppm action level but really used visual
 - c. Confirmation sampling for area below 1 ppm
 - d. Area now wetlands.
 - e. No further remediation except for area recontaminated by seeps from Type III landfill area.
2. Interim Remedial Measures – elective by Millenium and not approved by EPA or MDEQ
 - a. Installation of sealed Sheet pile wall
 - b. Partial landfill cover

- c. Groundwater collection system
 - i. Maintain historic levels
 - ii. Treatment, but no incoming PCBs – wells beneath waste

TABLE 2-5

Media of Concern, Zoning Classification, and Estimated Volumes of PCB-containing Soils and Sediments Exceeding PRGs
OU1 Feasibility Study Report—Allied Paper, Inc. / Portage Creek / Kalamazoo River Superfund Site

Subarea	Media of Concern	Zoning Classification	Estimated Volume (yd ³) ^a	Estimated Area (acres) ^a
Former Operational Areas				
Monarch HRDL				
HRDL Disposal Area ^b	Soils, groundwater	Manufacturing	170,000	6.8
Former Raceway Channel	Sediments		Less than 100	Less than 0.1
Former Type III Landfill ^c	Soils, groundwater	Manufacturing	405,000	13.6
Western Disposal Area				
Disposal Area ^d	Soils, groundwater	Manufacturing	270,000	13.2
Panelyte Property (southern end)	Soils		4,000	1.4
Panelyte Marsh	Sediments		300	0.9
Conrail Property	Soils		Less than 100	0.1
State of Michigan Cork Street Property	Soils		TBD ^e	TBD ^e
Bryant HRDLs/FRDLs ^e	Soils, groundwater	Manufacturing	635,000	22.1
Outlying Areas ^f				
Residential Area				
Golden Age Retirement Community	Soils	Residential	1,100	Less than 0.1
Single-Family Residences		Residential	2,100	0.3
Lyondell Trust (formerly MHLLC)-owned property		Manufacturing	7,700	1.1
Commercial Properties				
Goodwill lawn	Soils	Manufacturing	28,500	1.7
Goodwill parking lots			38,500	2.3
Goodwill beneath buildings			8,500	0.5
Consumers Power			1,100	Less than 0.1
Lyondell Trust (formerly MHLLC) Alcott Street Parking Lot			12,000	0.7
Filter Plant			TBD ^g	TBD ^g
Bryant Mill Property			TBD ^g	TBD ^g

^cFormer Type III Landfill: The estimated area represents the total area of PCB-containing soils. Of the 13.6 acres, it is estimated that approximately 10 acres (approximately 245,000 yd³) would be capped under a containment scenario, and that approximately 3.6 acres (approximately 160,000 yd³) would comprise the peripheral area.

^dWestern Disposal Area: The estimated area represents the total area of PCB-containing soils. Of the 13.2 acres, it is estimated that approximately 12 acres (245,000 yd³) would be capped under a containment scenario, and that approximately 1.2 acres (25,000 yd³) would comprise the peripheral area.

^eBryant HRDLs/FRDLs: The estimated volume associated with the Bryant HRDLs/FRDLs represents the volume of PCB-containing soil, not the total volume of soil. The total volume of soil associated with this area is approximately 725,000 yd³, which includes approximately 90,000 yd³ of clean soil cover.

^fThe volumes of PCB-containing soils within the Residential and Commercial Properties may be further refined based on additional delineation activities.

^gTBD limited information is available. A predesign field investigation will be required to define the extent of contamination if present.

Here are the areas/topics that she mentioned we should be able to discuss/address:

1. *Please explain why consolidation is a better option than removal.*
 1. Discuss Site Risks.
 1. General Landfill Risks
 1. Erosion and run-off
 2. Direct Contact
 3. Leaching to groundwater
 2. Allied Landfill Risks
 1. Risk of erosion and transport to Portage Creek.
 2. Risk of direct contact exposure
 3. PCBs found in groundwater outside of the waste.
 1. Allied Landfill does not pose a risk to the City of Kalamazoo Well-field
 4. Site-wide the risk is PCB-contaminated sediments eaten by fish which are consumed by subsistence anglers
 2. Consolidation and capping offers long term protection like total removal.
 3. During the cleanup, consolidation and capping has lower risks to community (H&S) and lower risks to Portage Creek. Total removal has higher short term risks:
 1. Recontamination of Portage Creek during excavation
 2. Health and safety issues from truck traffic. Trucks leaving the site every 4 minutes for the 5 years of construction work. 150,00 truck trips
2. *Aren't there dangers to the community with the consolidation option? Specifically, we are concerned about migration of contaminants from the site and potential risks to groundwater.*
 1. Groundwater at Allied Landfill does not pose a risk to the well field.
 1. Not flowing towards the well-field
 2. PCBs not leaving the waste.
3. *Some question about any form of encapsulation and the barriers between the contaminants and water, I think. She was confused on caps, types of caps, strengths of caps, etc.*
4. *What are the potential water contamination issues with the different types of caps?*
 1. TSCA landfills that accept PCB waste vs Allied Landfill and its specific waste
 1. TSCA Landfills:
 1. have caps and liners
 2. Accept all kinds of PCB waste (often liquid)
 2. Allied Landfill
 1. PCBs immobile in the waste
 2. Does not need a bottom liner

3. Not going to accept other PCB waste
5. Funding of these three alternatives discussed. Please clarify funding and the two trusts and what rules govern using the trust money.
6. She also gave Michael input on some of the more interesting spots on the tour and one that might be skipped (water monitoring/SEEPs.)
7. Suggested demonstrating cleanup distances/how big the cap might be.
8. I think we need to have a general informational response to remedy selection and making sure that it is protective while being cost effective.

Cost

- Among equally protective alternatives, EPA is supposed to select the alternative that is most cost effective.
- EPA's position set out in the Federal Register is that potential tax earnings or property value cannot not be considered as a part of the cost evaluation criteria.
- That said, EPA believes that there should be productive reuse of superfund sites whenever possible. EPA seeks to facilitate it. We are working with the city of Kalamazoo to that end.